## **Dirigo Energy Institute, Inc.**

Concept Study

The U.S. Minor Outlying Islands for Spent Nuclear Fuel and High Level Radioactive Waste Interim Storage

List	Function	Organization	Cost (12,13)
I.1	Staff Salaries and Benefits (1)	Dirigo Energy Institute	0.5
1.2	Operating Expenses (2)	Dirigo Energy Institute	0.2
1.3	Travel (3)	Dirigo Energy Institute	0.3
1.4	Concept Review (4)	To Be Determined	3
II.1	R&D (5)	To Be Determined	3
II.2	WasteTransport to U.S. Point of Departure (6)	To Be Determined	0.1
II.3	Waste Transport to Minor Outlying Island (7)	To Be Determined	0.1
II.4	Waste Storage Options: Minor Outlying Islands (8)	To Be Determined	0.1
III.1	Midway Atoll Waste Storage Options	To Be Determined	0.1
III.2	Wake Island Waste Storage Options	To Be Determined	0.1
III.3	Johnston Atoll Waste Storage Options	To Be Determined	0.1
III.4	Kingman Reef Waste Storage Options	To Be Determined	0.1
III.5	Palmyra Atoll Waste Storage Options	To Be Determined	0.1
III.6	Howland-Baker Islands Waste Storage Options	To Be Determined	0.1
III.7	Jarvis Island Waste Storage Options	To Be Determined	0.1
III.8	Meetings (9)	Dirigo Energy Institute	0.1
IV.1	Pneumatically Stabilized Platform	Float Incorporated	1
IV.2	SNF Storage Platform	Alion Science & Technology	1
IV.3	Breakwater/Radioactive Waste Storage Platform	Alion Science & Technology	1
IV.4	Personnel Living Facility	Alion Science & Technology	1
IV.5	Ocean Thermal Energy Conversion Power Plant	Alion Science & Technology	1
IV.6	Fast Ferry	Alion Science & Technology	1
IV.7	Double Hulled Transfer Ship	Alion Science & Technology	1
V	Training Program Design (10)	Alion Science & Technology	0.1
VI	Poll of General Public Reaction	To Be Determined	0.4
VII	Final Report (11)	Dirigo Energy Institute	0.4
VIII	Contingencies @ 10% of total	Various	2
IX	Fees @ 10% of total	Dirigo Energy Institute	2
Χ	Total		20

Notes: 1 - Project Manager plus staff of four - salaries and benefits

- 2 Offfice rent, computers, printers, supplies, utilities, phones, etc.
- 3 Thirty trips @ \$10,000/trip
- 4 10,000 hours @ \$300 per hour split equally between a team of Devil's Advocates and a team to rebut their findings.
- 5 Submerged Canister Storage, Ship Transport, and Air Transport
- 6 By sea, rail, or truck
- 7 By sea or air
- 8 On land, on floating platform, in natural or artificial lagoon
- 9 Planning and travel to investigate alternate locations/support
- 10 For security, radiation monitoring, and maintenance personnel
- 11 To include projected personnel requirements and projected 20 year annual budgets
- 12 One year to complete using concept drawings for cost estimates
- 13 Dollars shown in millions with a minimum of 0.1